

CHROMOSOME NUMBERS FOR *DALEA* SPECIES (FABACEAE) FROM  
SOUTHWESTERN NEW MEXICO AND SOUTHEASTERN ARIZONA

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ABSTRACT

Chromosome numbers are reported from New Mexico and Arizona for eleven taxa within the genus *Dalea*. These include counts for *D. grayi* and *D. polygonoides*, species previously counted only from Mexican material, and a new diploid count for *D. albiflora*.

KEY WORDS: Fabaceae, *Dalea*, chromosome number

The following chromosome number determinations were made from *Dalea* species growing in southwestern New Mexico and southeastern Arizona. Most of the counts are verifications of earlier counts, but a new diploid count is reported for *Dalea albiflora*, previously known only as a tetraploid. All collections were made on September 15, 16, and 17, 1989 by the three authors. The collection numbers are Sutherland's. Cytological material was stained in Snow's hydrochloric-acid-carmin stain (Snow 1963). Voucher specimens are deposited at NMC with some duplicates at OMA and NY.

*Dalea albiflora* A. Gray.  $n=7$ . UNITED STATES. Arizona: Cochise Co., 1.6 km NW of Bisbee along Old Hwy 80 (old road to Mule Pass), #6874.  $n=14$ . New Mexico: Sierra Co., E of the Mimbres Mts., 22.5 km N of

Nutt, 0.8 km N of Lakewood, #6851; Arizona: Cochise Co., Geronimo Trail Road, 5.5 km W of the summit, #6882. The diploid count was from a vigorous plant, with numerous stems arising from a woody, branched caudex. The two tetraploid counts reported here and the ones previously reported (Ward & Spellenberg 1988, as *D. ordiae* A. Gray) are all from slender plants that have stems arising singly and in small clusters from along a slender, creeping rootstock. This complex and variable taxon is in need of further study.

*Dalea brachystachys* A. Gray.  $n=7$ . UNITED STATES. New Mexico: Sierra Co., E of the Mimbres Mts., along NM Hwy 27, 3.4 km S of Hillsboro, #6852; E of the Mimbres Mts., along NM Hwy 152 by bridge over Percha Creek, 11.7 km W of Hillsboro, 2.2 km E of Kingston, #6859. These agree with previous counts from Texas (Turner & Fearing 1960) and from México (Mosquin 1977).

*Dalea filiformis* A. Gray.  $n=7$ . UNITED STATES. New Mexico: Grant Co., 5.5 km east of Hanover, 12.9 km east of Central, along NM Hwy 152, #6861. This is in agreement with previous counts from Arizona (Ward & Spellenberg 1988) and from México (Mosquin 1977).

*Dalea grayi* (Vail) L.O. Williams.  $n=7$ . UNITED STATES. Arizona: Cochise Co., 22.5 km off U.S. Hwy 80 along road to Herb Martyr, #6868; Arizona: Cochise Co., 1.6 km NW of Bisbee along Old Hwy 80 (old road to Mule Pass), #6875; Arizona: Cochise Co., W slope of Peloncillo Mts., Geronimo Trail Rd., 5.5 km W of the summit, #6883. These agree with a previous count from México (Mosquin 1977).

*Dalea lachnostachys* A. Gray.  $n=7$ . UNITED STATES. New Mexico: Sierra Co., E of the Mimbres Mts., along NM Hwy 27, 3.4 km S of Hillsboro, #6853; Arizona: Cochise Co., Geronimo Trail Rd., 4.3 km E of Douglas, #6876. These agree with previous counts from Texas (Turner & Fearing 1960) and from México (Mosquin 1977; Spellenberg 1979).

*Dalea leporina* (Aiton) Bullock.  $n=7$ . UNITED STATES. New Mexico: Sierra Co., E of the Mimbres Mts., along NM Hwy 27, 3 km S of Hillsboro, #6856. This agrees with previous counts for this species from eastern North America, México, and undisclosed locations (Atchison 1949, as *D. alopecuroides* Willd.; Spellenberg 1973; Mosquin 1977).

*Dalea nana* Torr. var. *carnescens* (Rydb.) Kearney & Peebles.  $n=7$ . UNITED STATES. New Mexico: Sierra Co., E of the Mimbres Mts., 22.5 km N of Nutt, 0.8 km N of Lakewood, #6850. This agrees with counts from Texas and México (Mosquin 1977).

- Dalea neomezicana* (A. Gray) Cory var. *neomezicana*.  $n=8$ . UNITED STATES. New Mexico: Sierra Co., E of the Mimbres Mts., along NM Hwy 27, 3.4 km S of Hillsboro, #6854. This is in agreement with previous counts from Texas (Spellenberg 1977) and from México (Mosquin 1977).
- Dalea pogonathera* A. Gray var. *pogonathera*.  $n=7$ . UNITED STATES. New Mexico: Sierra Co., E of the Mimbres Mts., along NM Hwy 27, 3.4 km S of Hillsboro, #6855. This agrees with a previous report from New Mexico (Spellenberg 1973) and with counts from Texas and México (Mosquin 1977).
- Dalea polygonoides* A. Gray.  $n=7$ . UNITED STATES. New Mexico: Sierra Co., E of the Mimbres Mts., along NM Hwy 152 by bridge over Percha Creek, 11.7 km W of Hillsboro, 2.2 km E of Kingston, #6858; New Mexico: Grant Co., 5.5 km east of Hanover, 12.9 km east of Central, along NM Hwy 152, #6862. These counts agree with a report from México (Mosquin 1977).
- Dalea versicolor* Zucc. var. *sessilis* (A. Gray) Barneby.  $n=7$ . UNITED STATES. Arizona: Cochise Co., Geronimo Trail Road, 4.7 km W of the summit, #6882. This agrees with previous counts reported by Spellenberg (1973) from México and Arizona.

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